

---

Citation:

Adams, S and Font, X and Stanford, DJ (2017) 'All Aboard the Corporate Socially and Environmentally Responsible Cruise Ship: A conjoint analysis of consumer choices. *Worldwide Hospitality and Tourism Themes*, 9 (1). pp. 31-43. ISSN 1755-4217 DOI: <https://doi.org/10.1108/WHATT-11-2016-0061>

Link to Leeds Beckett Repository record:

<https://eprints.leedsbeckett.ac.uk/id/eprint/3265/>

Document Version:

Article (Accepted Version)

---

The aim of the Leeds Beckett Repository is to provide open access to our research, as required by funder policies and permitted by publishers and copyright law.

The Leeds Beckett repository holds a wide range of publications, each of which has been checked for copyright and the relevant embargo period has been applied by the Research Services team.

We operate on a standard take-down policy. If you are the author or publisher of an output and you would like it removed from the repository, please [contact us](#) and we will investigate on a case-by-case basis.

Each thesis in the repository has been cleared where necessary by the author for third party copyright. If you would like a thesis to be removed from the repository or believe there is an issue with copyright, please contact us on [openaccess@leedsbeckett.ac.uk](mailto:openaccess@leedsbeckett.ac.uk) and we will investigate on a case-by-case basis.

## **Introduction**

Today's consumers not only want the many benefits associated with twentieth century cruising, but also want a twenty-first century approach that engages the personal values influencing their purchases (Mc Hugh, 2010) and takes into account the fact that today's consumers are more aware of environmental issues and demand change (Jones, 2010). Cruise consumers are increasingly demanding pro-social and pro-environmental practices (Klein, 2011) as part of cruise companies' ethical behaviour, and as cruising grows, it will embrace younger cruise guests concerned about quality of life in which ethical conduct, social engagement and ecological consciousness is an important components in their lifestyle (Ahrens, 2011). However, little is known about the precise impact of Corporate Social and Environmental Responsibility (CSER) strategies on consumers in spite of the fact that consumers are often identified as a driver for the business case (Smith et al., 2010). In effect it is often argued that CSER is largely driven by publicly traded companies in developed regions such as Europe that use it as a means to reduce any potential risks that may impact on the financial value of company stocks (Dodds and Joppe, 2005). Such strategies are designed to suggest transparency and accountability by association (Hirschland, 2003) and substantiated through the production of annual reports to ensure transparency (Dodds and Joppe, 2005).

Companies engage in sustainable development strategies for a number of reasons: to gain a competitive advantage over existing products, to legitimise their existing products or for altruistic reasons because they feel that it is indeed the right thing to do for people and planet (Font et al., 2012, El Dief and Font, 2010). Whatever the reason(s) for engagement, it ultimately impacts on the image of the companies and their brand(s) from the perspective of the consumers. Therefore, if today's consumers are indeed demanding this change in cruise company behaviour, the crucial underlying question is ultimately, 'will cruise passengers knowingly book a cruise with a company that does not have CSER Policies & Practices'? Numerous surveys suggest the market is willing to make trade-offs to buy more sustainable products. Yet both Sheppard and Fennell (2008) and Miller et al. (2010) found evidence that while consumers themselves are willing to take socially and environmentally responsible actions while at home as part of their day to day activity, they do not want to be 'burdened' with thinking of this while on holiday.

This research aims to describe cruise passengers' cruise product preferences and attempts to explain the importance levels associated with product attributes, thereby determining to what extent cruise passengers incorporate CSER information when choosing a cruise holiday. The authors quantify the significance of CSER to the cruise passenger compared to the identified consumer choice purchase attributes (Price, Quality, Destination, and Duration), thereby

providing an understanding of the relative importance of one attribute in relation to the others in Consumers Behaviour Decision Making (CBDM). The authors then determined if experienced cruise consumers are more likely to value a cruise company's commitment to CSER therefore through purchase behaviour repeat business may be able to influence a cruise company's marketing strategy.

## **Literature Review**

### **Taking Cruise Lines' sustainability seriously**

The cruise industry is a growth sector with CLIA and TNS (2011), FCCA (2012), BREA and FCCA (2012 (a)), PSA and ACE (2011), PSA and ACE (2012), PSA (2013), ABTA (2013), ECC (2012) all highlighting and emphasising growth of the cruise sector as part of the tourism and travel industry within the market place. This growth is in spite of economic uncertainty, high cost of fuel, the addition of the Air Passenger Duty and lower levels of disposal incomes in households and the related fact that consumers are holidaying closer to home and therefore avoiding the high cost of air travel. The association reports across industry refer primarily to the economic benefits accrued to the various economies globally, as the impact is far reaching throughout the seven continents of the world.

Cruise industry organisations are less forthcoming with collective socio and environmental impact reports than other sectors. As part of the 35<sup>th</sup> anniversary celebration CLIA (2010) released an environmental report outlining the current and future policies and technologies in use. However, the report does not reveal quantifiable scientific figures that could be used by academic researchers as an overall industry benchmark of environmental progress. There are, however, many press releases to inform the public at large about the industry's progress. For example Tunney (2011), Chris Cruises (2012), Satchell (2011) and Caribbean News Digital (2011) all make reference to several positive environmental developments within the industry. Various aspects of cruise companies' sustainability - CSER policies and practices are showcased. For example in the online line travel newspaper (Green Traveler Guides, 2013) the CLIA highlighted the investment made by the cruise line members in new eco technologies in an effort to protect air and water quality as well as increasing energy efficiency of the ships. These include using recycled hot water to heat passenger cabins, special window tinting to keep passengers cooler while using less air-conditioning and switching to low-energy LED lights which last 25 times longer, use 80% less energy and generate half as much heat (Green Traveler Guides, 2013:1). Much of these are in keeping with the strategy outlined in the CLIA (2010) sustainable development report.

Some quantifiable data can, however, be found in the reports of individual cruise lines. One of the easiest Sustainability Reports to access is that of Costa Crociere S.p.A. The Costa Cruises (2011) report as with the reports of the past six years highlights the progress to date and the objectives and strategies for the upcoming year. There are also a few formal studies being documented. For example, the European Union's Sustainable Cruise Project on Costa Pacifica. This pilot research documents Costa's commitment to recovery and recycling of

waste (Sustainable Cruise, 2012). While the progress of this project is documented and easily accessible via the program's website, viewers are not privy to quantitative data. Little benchmark data is forthcoming. The social and environmental benefits are therefore not explicitly explained. This could lead readers to deduce that the social and environmental benefits are minimal and there are mainly social and environmental dis-benefits, especially if any of the cruise industry's claims of social and / or environmental progress are not properly substantiated. This is important, bearing in mind that consumers are often sceptics when it comes to eco-friendly and ethical claims made by companies (Mohr et al., 2001).

Cruise companies' CSER is not considered a 'traditional' cruise booking attribute yet its significance within the industry's cruise marketing research is very slowly becoming evident in spite of the highly competitive nature of the cruise line business. For example, in the CLIA and TNS (2011:112) USA based Cruise Market Profile Study, the following statement was made, subsequently asking survey respondents the direct question, 'Many people and businesses are adopting 'green' and earth friendly policies to help protect the environment. How important is it to you that a business or service that you utilise is proactively adopting 'green' initiatives? While the question is somewhat ambiguous and focused only on the environmental aspect of corporate responsibility, the mere inclusion in the CLIA and TNS (2011) study indicates that industry has acknowledged that it is a factor of some significance to the consumer. However, this is one of the few published industry reports to include this attribute specifically in consumer marketing research. The focus seems to be primarily on making consumers aware of their eco-friendly and socially focused CSER practices as a form of green and social responsibility marketing strategy. For example in early 2013 CLIA launched the Cruise Forward initiative (Green Traveler Guides, 2013) on social media with the primary objective of showcasing examples of the positive environmental practices of CLIA cruise line members to protect the oceans, beaches and ports.

There is evidence to suggest that some cruise lines have indeed acknowledged and have started to take responsibility for the sustainability challenge. Johnson (2006:44) concluded that 'available published evidence suggests that cruise operators are now taking sustainability seriously, driven particularly by international legislation'. Companies such as Royal Caribbean International (RCI), Carnival Corporation (CC) and Norwegian Cruise Lines (NCL), are among the companies that subscribe to CSER practices, as evidenced on their respective company web-sites and reports (RCI (2008), (CLIA, 2010); Sweeting and Wayne (2003). The issues are primarily operational relating to the management and performance of the ship and the impact on the destinations to which they call. This is substantiated by the issues identified by stakeholders of Small Island Developing States to which cruise ships call (UNWTO, 2004:57). Mitigation and adaption strategies have been a result of regulation governed by organisations such as the International Maritime Organisation; voluntary codes of conduct such as environmental and quality management systems such as ISO14001, ISO 9001 and the certification for marine and land tour operators; and the use of new technology such as CSNOX to remove sulphur oxide, oxides of nitrogen and carbon dioxide from cruise ship engine emissions in one process. Solutions to cruise ship sustainability issues require the participation of multiple stakeholders not only the cruise lines.

This positive recognition by the efforts of the cruise lines to date is reflected primarily in industry organisations and media reports. Advocacy groups and the academic press are less complimentary and forgiving. For example, Friends of the Earth in their 2013 Cruise ship environmental report card indicated that of the 16 major cruise lines six improved in their practices of sewage treatment, air pollution and water quality compliance since 2012, three companies decreased in standards and six others remained unchanged. They argue that cruise ships are among the world's largest polluters of the air and water. Academics such as Klein (2007) suggest that the cruise companies spend money on environmental initiatives merely for the benefit of their brand image and questions the personal benefits and integrity of the individuals and companies that often conduct studies on half of the cruise lines. Most cruise companies do not communicate any CSR practices, and of those that do, only a small percentage report actual hard data of performance (Bonilla-Priego et al., 2014). In addition, the socially and environmental benefits are not always explicitly explained by cruise companies, therefore leading some sustainability analysis to deduce that the social and environmental benefits are minimal and that there are social and environmental dis-benefits when the quality of information; carbon off-set verification and technical information are questionable (RETI, 2008).

However, scholarship from a general business perspective suggests that each organisation will pursue different positions on CSER and ultimately how the organisations' responsibilities are managed and strategies applied is based on individual motivation and outcome (Coulson, 2009, Johnson et al., 2008, Sarkar, 2008, Freeman et al., 2007, Hawkins, 2006, Basu and Palazzo, 2010). There are a number of primary motivators, for example: to gain a competitive advantage by image/ branding (Babiak and Trendafilova, 2010, Ditlev-Simonsen and Midttun, 2010, Johnson et al., 2008, Interbrand, 2011); a desire to achieve Corporate Financial Profitability (Hawkins, 2006, Aslaksen and Synnestvedt, 2003); and to legitimise the actions of the organisation or altruistic reasons (Font et al., 2012). Whatever the reason(s), stakeholder influence, including that of the cruise consumers, determines the success or failure of the cruise lines as with any other business. Therefore, contributing to the gaps specifically in cruise consumer research by providing quantifiable primary data for the purpose of benchmarking against future changes in cruise consumer response towards cruise line social and environmental strategies will help to facilitate the process of behavioural change in favour of sustainable holiday products.

## **Method**

Cruise passengers from the 50 calls of the Royal Caribbean International and Celebrity Cruise Lines Ships were surveyed at the Port of Southampton, England, resulting in 441 useable questionnaires. Seventy-eight had never cruised before and 116 had cruised with other brands previously. Choice Based Conjoint Analysis was used as the data collection survey technique and Counts Analysis for preference and Hierarchical Bayes Estimation for importance levels data analysis methods, from Sawtooth Software Inc. In conjoint analysis the dependent variables are examined in relation to their product attributes, factors or features (Orme, 2010). An attribute by contrast to a variable is therefore a fundamental product or service characteristic such as brand, colour, price or speed, all unique in meaning and



independent of the other attributes (Orme, 2010). Therefore, the terminologies used are attributes (dependent variables) and co-variates (independent variables).

Four attributes were chosen mirroring primary sales variables from cruise companies websites (see Figure 1) as they are variables that cruise consumers must provide to be able to book a cruise and therefore those focused on in this conjoint analysis research study in keeping with recommendations of authors such as Louviere (1988). These are Standard (Ward, 2010, Ward, 2008, Stern, 2007, Showker and Sehlinger, 2007), Price (PSA, 2011, Petrick, 2005, Petrick, 2011), Duration (PSA, 2011, PSA and ACE, 2011, Chiam et al., 2009, IRN et al., 2011) and Destination (Davies, 2010, Dickinson and Vladimir, 2008).

There are other attributes prospective consumers are exposed to on the websites, to enhance the cruise experience and 'sway' or 'close' the sale and include 'peace of mind'. Cruise companies invest heavily in their Brand Name (Fan, 2005, Erdem and Keane, 1996) to encourage loyalty (Huber et al., 1992, Interbrand, 2011). Brand Name informs about likely performance, expected benefits and the relative price of an item (Huber et al., 1992, Smith and Brynjolfsson, 2001). However, such inferences have been shown to be unreliable in the conjoint studies (Huber et al., 1992). While brand name is deemed to be a reasonable product choice criteria in the market place, it has less impact in the orthogonalised world of conjoint analysis because the value of brand as an indicator of quality is lessened, placing less value on the name importance (Huber et al., 1992). We chose therefore to keep Brand Name as an attribute, but to anonymise it to not have unrealistic scenarios (e.g. Cunard as 1 Star service) and because the primary intention was to see the relative importance of other variables. Finally we also included Travel Insurance to cover the uncertainty associated with booking holidays (such as Risk of unforeseen holiday disruption), which was identified as a compulsory booking requirement within the booking engine (Rotondo, 2012, Fearis, 2012 (a)).

Ipsos MORI (2010), Tearfund (2001), Interbrand (2011) and others use age, income, education, and geographic location as covariates in ethics research, yet in Choice Based Conjoint analysis and Hierarchical Bayes estimation (CBC/HB) demographic variables have been critiqued as having low correlations with preferences within choice contexts and have been determined to provide little exogenous information to the model that would improve the estimates of part-worth and market predictions (Orme and Howell, 2009). Age, gender and nationality were used for comparative purposes with existing non-conjoint analysis surveys involving consumer behaviour attitude towards CSER. In addition, five behavioural covariates were used to increase the efficiency of the model estimates and for comparison to the United Kingdom's PSA Report: cruise frequency, RCI loyalty, cabin preference, booking mode and cruise plans.

### **Data analysis**

Based on the premise that consumers are not homogenous, an individual level model as opposed to an aggregate level model formed the basis of the research model- CBC/HB. Unlike aggregate models, the CBC/HB individual model assumes that consumers are heterogeneous in behaviour and there is no assumption of Interdependence of Irrelevant

Alternatives (associated with Logit models) because of this independence in choice behaviour (Johnson et al., 1995, Huber, 2012). Choice Based Conjoint Analysis System for Hierarchical Bayes Estimation (CBC/HB) allows measuring the relative trade-offs at the group level of the cruise ship passengers sampled. It uses a randomised choice-based conjoint technique in which each cruise passenger respondent made choices identifying the attributes of interest to themselves, from a small number of sets randomly drawn from a list of given attribute levels which were then analysed at the group level using Salient Multi-attribute Research Technique (SMRT). SMRT does not measure the utility (preference) associated with the levels but the utility (preference) attached to the movement between levels (Brin, 2002). These utility values were grouped together and the main values were then examined and compared with other groups. The HB system therefore borrowed information from the survey population information (means and covariance) to describe the Average Importance of other respondents in the same dataset (Howell, 2009, Orme and Howell, 2009). This software estimates an HB model using a Monte Carlo Markov Chain algorithm (Johnson, 2000), in this case the 'Gibbs Sampler' to show graphic correlation between variables. By using CBC/HB it was expected that the results produced by this study would provide clear indications of the cruise passengers behaviour preferences for cruise products that include CSER policies and practices or not and which attributes were of greatest importance in the cruise product choice process.

## Results

One in three cruise passengers will knowingly book a cruise with a company that does not have CSER policies and practices (0.172 no CSER vs 0.328 CESR,  $p < .01$ ). The relationship between CSER compared to the other attributes (i.e. the joint effect (two-way interaction effects) indicated that the only attributes of significance to CSER is the Price of the cruise package. All the other attributes - Brand Name, Destination, Disruptions, Duration and Standard of the cruise are not significant to the cruise passenger when it comes to a company's Brand Image. It is evident that there is a correlation between CSER (Brand Image) and Price. Furthermore, it can be deduced that Cruise Consumers favour other attributes over CSER policies and practices when choosing a cruise. While the majority of cruise consumers showed preference towards sustainable products, the only attribute that was of significance to CSER was Price. The results suggest that cruise consumer may be willing to pay a little more for products from cruise companies that engaged CSER policies and practices over companies that did not. The term 'may be' is used because these results are based on an estimated population of the maximum cruise passengers' capacity per ship. A shortfall of choice studies (Marquina, 2010, Hensher et al., 2005).

The second phase of the analysis therefore focused on the importance levels placed on each of the attributes within the package by the consumers. Consumers found CSER as an attribute to be of lower importance in overall product value, based on the individual level model of Hierarchical Bayes Estimation as rescaled results. Re-scaling to the 'zero-centred diffs' is the default method used in the Sawtooth Software SMRT Market Simulator to reflect the relative weight (importance) of the attributes. The process entails the weighted (importance) calculation for each attribute which is determined by the difference between the best and

worst levels within each attribute (Bakken and Frazier, 2006). The method balances the level of 'noise' at individual level data analysis to produce more balanced results that better represent the fit of the data to the model and is devoid of the assumption of IIA. Table 1 depicts the HB Average Importance results of the sample. At a percentage certainty of 0.768, the model is 76.8% better than chance and a very good fit between the model and the data in representing the choices of the respondents. With a Root Likelihood value of 0.726, also indicates that the fit between the model and the data is very good at over three times the chance level.

\*\* INSERT Table 1 here \*\*

The results indicate that the Standard (Quality) of the cruise was the most important attribute, closely followed by Price. The Duration (Length) of the cruise and the Destination (Cruise Itinerary) followed in third and fourth levels of importance respectively with CSER among the three least important attributes along with Brand (Name) and Insurance coverage for the Disruption. Given that Standard and Price were found to be the attributes of greatest importance this constituted rational consumer behaviour given that consumers seek to maximise their utility based on their available income, taste and product price. This is evident in today's economic climate where consumers often focus on perceived value of products based on the combined elements of product price and quality. Destination (Cruise Itinerary) and Duration (Cruise Length) followed as the next attributes of importance before CSER. CSER was however of greater consequence when consumers had to make trade-offs between similar product bundles as depicted in Figure 1. This suggests that cruise consumers use company / brand image when deciding between similar product bundles. Therefore we can expect CSER to continue to be of marginal importance in Cruise CBDM for many of the consumers in spite of the fact that Cruise Ships are increasing in size (passenger capacity) (FCCA, 2012).

\*\* INSERT Figure 1 here \*\*

## **Conclusion**

We are at a stage where cruise consumers are interested in knowing about companies' sustainability practices and the research results demonstrates this. Cruise consumers are driven primarily by the economic climate but at nearly 2:1, it is also evident consumers do value CSR as part of a company's brand image. One of the primary arguments about consumers and sustainability issues is that while consumers themselves are willing to take socially and environmentally responsible actions while at home as part of their day to day activity, they do not want to be 'burdened' with thinking of this while on holiday (Miller et al., 2010, Sheppard and Fennell, 2008). This research suggests that consumers would consider a company's sustainability policies and practices when choosing between several companies of similar product types, once the information is readily available / presented and consumers do not have to go in search of it. When compared to the other cruise product attributes, CSER was not the attribute of least importance, for that matter it was one of the



three attributes suggested to influence the final decision made by the respondents when Price and Standard were equal. Therefore, the importance of CSER in the cruise consumer behaviour decision-making is not trivial by any means and could play a significant role towards encouraging cruise lines to adhere to positive social and environmental policies and practices.

We now know that cruise consumers behave both rationally when there is sufficient information provided and irrationally when additional information is required (Darnton, 2008, McFadden, 1980). However, since the research data does not distinguish those consumers who were rational in their decision making from those who were not, the assumption remains in keeping with classical rational utility consumer theory (McFadden, 1980) that the majority of cruise consumers behave rationally most of the time and as such this can be applied to finding solutions to the challenges faced with getting consumers to change their attitude towards the purposeful purchase of sustainable products all of the time. Specific to sustainable tourism, UK consumers believe that companies should be and act socially and environmentally sustainable (Miller et al., 2010). We also know that consumers engage heuristic strategies in information processing and when products are similar, consumers look for differentiating features or attributes to assist with the final selection in the process (Orme, 2010). This differentiating attribute is often the deciding factor especially when the product price and quality are perceived to be equal by the consumer. Therefore, the sustainability information available to consumers at this decision making stage could give companies that competitive edge when consumers are determining overall product value and deciding on the final product purchase.

The results of this study nevertheless suggest that firstly, there is a level of expectation by consumers that cruise lines have CSER policies and practices and secondly, that some consumers would possibly be willing to avoid the ethics / environmental laggards by not purchasing the unsustainable, non-CSER product. This expectation by consumers as to holiday companies' sustainability practices is consistent with the findings of Miller et al. (2010), in which consumers stated that while they believed going on holiday is a 'right' and choosing a holiday should not be subject to ethical adjudication, they felt it was the responsibility of the holiday companies to provide consumers with sustainable holiday product choices. They also felt that government regulation and company ethics should remove any unscrupulous operators leaving only pro-social and pro-environmental, ethical operations for consumers to choose from. All this tells us that CSER is of importance to the majority of consumers even though they may not currently place it in the forefront of their holiday decision-making process. Therefore, quantifying how important CSER is in relation to other traditional cruise booking attributes is a crucial contribution towards the understanding of cruise CBDM. These findings will enable tourism stakeholders to move forward towards establishing solutions to change consumers' consumption patterns towards the purposeful purchasing of sustainable products including holiday products, all of the time.

## References

- ABTA 2013. Travel Trends Report 2013. [http://67d8396e010decf37f33-5facf23e658215b1771a91c2df41e9fe.r14.cf3.rackcdn.com/publications/Travel\\_trends\\_report\\_2013.pdf#page=8&zoom=auto,0,222](http://67d8396e010decf37f33-5facf23e658215b1771a91c2df41e9fe.r14.cf3.rackcdn.com/publications/Travel_trends_report_2013.pdf#page=8&zoom=auto,0,222): Association of British Travel Agents.
- AHRENS, S. What younger luxury cruise guests expect and how to market to them. In: MANAGING DIRECTOR, H.-L. C., ed. Cruise Shipping Miami, 2011 Florida, USA.
- ASLAKSEN, I. & SYNNESTVEDT, T. 2003. Ethical investment and the incentives for corporate environmental protection and social responsibility. *Corporate Social Responsibility and Environmental Management*, 10, 212-223.
- BABIAK, K. & TRENDAFILOVA, S. 2010. CSR and environmental responsibility: motives and pressures to adopt green management practices. *Corporate Social Responsibility and Environmental Management*.
- BAKKEN, D. & FRAZIER, C. L. 2006. Conjoint Analysis: Understanding Consumer Decision Making. In: GROVER, R. & VRIENS, M. (eds.) *The Handbook of Marketing Research*. USA: SAGE Publications, Inc.
- BASU, K. & PALAZZO, G. 2010. *Corporate Social Responsibility: A Process Model Of Sensemaking*.
- BONILLA-PRIEGO, M. J., FONT, X. & PACHECO-OLIVARES, M. D. R. 2014. Corporate sustainability reporting index and baseline data for the cruise industry. *Tourism Management*, 44, 149 - 160.
- BREA & FCCA 2012 (a). Economic Contribution of Cruise Tourism to the Destination Economies. <http://www.f-cca.com/research.html>: Florida Caribbean Cruise Association.
- BRIN, R. J. 2002. *The International Handbook of Market Research Techniques*., Kogan Page Limited, UK.
- CARIBBEAN NEWS DIGITAL. 2011. Cruise Industry Increases Efforts to Protect the Environment. Caribbean News Digital.
- CHIAM, M., SOUTAR, G. & YEO, A. 2009. Online and off-line travel packages preferences: a conjoint analysis. *International Journal of Tourism Research*, 11, 31-40.
- CHRIS CRUISES. 2012. Cruise Industry focusing more on environmental efforts in 2012. ChrisCruises.net.
- CLIA 2010. CLIA at 35: Steering a Sustainable Course. [http://www.cruising.org/vacation/news/press\\_releases/2010/09/celebrating-its-35th-year-clia-releases-new-environmental-report](http://www.cruising.org/vacation/news/press_releases/2010/09/celebrating-its-35th-year-clia-releases-new-environmental-report): Cruise Lines International Association.
- CLIA & TNS 2011. Cruise Lines International Association 2011 Cruise Market Profile Study. <http://cruising.org/regulatory/clia-statistical-reports>: Cruise Line International Association, Inc.
- COSTA CRUISES 2011. Sustainability Report 2011. <http://www.costacruise.com/contents/bsa/2011/eng/index.html>: Costa Crociere Italy.
- COULSON, A. B. 2009. How should banks govern the environment? Challenging the construction of action versus veto. *Business Strategy and the Environment*, 18, 149-161.
- DARNTON, A. 2008. Reference Report: An Overview of behaviour change models and their uses. [http://www.civilservice.gov.uk/wp-content/uploads/2011/09/Behaviour\\_change\\_reference\\_report\\_tcm6-9697.pdf](http://www.civilservice.gov.uk/wp-content/uploads/2011/09/Behaviour_change_reference_report_tcm6-9697.pdf): Center for Sustainable Development, University of Westminster.
- DAVIES, P. 2010. Cruise Itineraries More Important Than Price - Poll Shows. TravelMole Daily UK Newswire, 02/03/2010.
- DICKINSON, B. & VLADIMIR, A. 2008. *Selling The Sea*., John Wiley & Sons Inc, New Jersey.
- DITLEV-SIMONSEN, C. D. & MIDTTUN, A. 2010. What motivates managers to pursue corporate responsibility? a survey among key stakeholders. *Corporate Social Responsibility and Environmental Management*.
- DODDS, R. & JOPPE, M. 2005. CSR in the Tourism Industry? The Status of and Potential for Certification, Codes of Conduct and Guidelines. CSR Practice Foreign Investment Advisory Service Investment Climate Department.

- ECC 2012. THE CRUISE INDUSTRY: Contribution of Cruise Tourism to the Economies of Europe. . In: G.P WILD (INTERNATIONAL) LIMITED & BUSINESS RESEARCH & ECONOMIC ADVISORS - BREA (eds.) 2012 ed.  
<http://www.europeancruisecouncil.com/content/economic%20report.pdf>: European Cruise Council.
- EL DIF, M. E. & FONT, X. 2010. The determinants of hotels' marketing managers' green marketing behaviour. *Journal of Sustainable Tourism*, 18, 157 - 174.
- ERDEM, T. & KEANE, M. 1996. Decision-making under uncertainty: Capturing dynamic brand choice processes in turbulent consumer goods markets. *Marketing Science*, 15, 1-20.
- FAN, Y. 2005. Ethical branding and corporate reputation. *Corporate Communications. An International Journal.*, 10, 341 - 350.
- FCCA 2012. Cruise Industry Overview - 2012. <http://www.f-cca.com/downloads/2012-Cruise-Industry-Overview-Statistics.pdf>: Florida-Caribbean Cruise Association.
- FEARIS, B. 2012 (a). Court ruling throws doubt - again - over what constitutes a package holiday. *TravelMole Daily UK Newswire*.
- FONT, X., WALMSLEY, A., COGOTTI, S., MCCOMBES, L. & HAUSLER, N. 2012. Corporate social responsibility: The disclosure-performance gap. *Tourism Management*, 33, 1544 - 1553.
- FREEMAN, R. E., HARRISON, J. S. & WICKS, A. C. 2007. *Managing for Stakeholders: survival, reputation, and success.*, London, Yale University Press.
- GREEN TRAVELER GUIDES. 2013. Cruise Industry claims eco-progress. *Green Traveler News*.
- HAWKINS, D. E. 2006. *Corporate Social Responsibility: balancing tomorrow's sustainability and today's profitability.*, Basingstoke, Hampshire, UK, Palgrave Macmillan.
- HENSHER, D. A., ROSE, J. M. & GREENE, W. H. 2005. *Applied choice analysis: a primer*, Cambridge Univ Pr.
- HIRSCHLAND, M. J. 2003. Strange bedfellows make for democratic deficits: The rise and challenges of private corporate social responsibility engagement. In: SHAH, R. A., MURPHY, D. F. & MCINTOSH, M. (eds.) *Something To Believe In. Creating Trust and Hope in Organisations: Stories of Transparency, Accountability and Governance*. UK: Greenleaf Publishing Limited.
- HOWELL, J. 2009. CBC/HB for Beginners. Sawtooth Software Research Papers Series. [www.sawtoothsoftware.com](http://www.sawtoothsoftware.com): Sawtooth Software Inc., Sequim WA.
- HUBER, J. 2012. CBC Design for Practitioners: What Matters Most. Sawtooth Software Conference 2012. Orlando Florida: Sawtooth Software Inc.
- HUBER, J., WITTINK, D. R., JOHNSON, R. M. & MILLER, R. 1992. Learning Effects in Preference Tasks: Choice-Based Versus Standard Conjoint. Sawtooth Software Research Paper Series. [www.sawtoothsoftware.com](http://www.sawtoothsoftware.com): Sawtooth Software Inc., Sequim WA.
- INTERBRAND 2011. The New Age of Corporate Citizenship: Doing strategic good that build brand value. In: ZARA, T. (ed.).
- IPSOS MORI 2010. Corporate Responsibility Attitudes of the British Public - Ethics in Business. In: ETHICS, I. M. I. O. B. (ed.). *Institute of Business Ethics*.
- IRN, PSA & ECC 2011. UK and European Cruise Market 2010. Passenger Shipping Association & European Cruise Council.
- JOHNSON, D. 2006. Providing Ecotourism Excursions for Cruise Passengers. *Journal of Sustainable Tourism*, 14, 43 - 54.
- JOHNSON, F. R., DESVOUSGES, W. H., WOOD, L. L. & FRIES, E. E. 1995. Conjoint Analysis of individual and aggregate environmental preferences. Working Papers [Online]. Available: <http://econpapers.repec.org/>.
- JOHNSON, G., SCHOLLES, K. & WHITTINGTON, R. 2008. *Exploring Corporate Strategy*, England, Pearson Education Limited.
- JOHNSON, R. M. 2000. Understanding HB: An Intuitive Approach. Sawtooth Software Research Paper Series. [www.sawtoothsoftware.com](http://www.sawtoothsoftware.com): Sawtooth Software Inc., Sequim, WA.
- JONES, M. Greening the Supply Chain. In: V.P. SUPPLY CHAIN, R. C. C. L., ed. *Cruise Shipping Virtual Conference*, 2010 Online.

- KLEIN, R. A. 2007. The Politics of Environmental Activism: a Case Study of the Cruise Industry and the Environmental Movement. *Social Research Online*, 12, 1 - 15.
- KLEIN, R. A. 2011. Responsible Cruise Tourism: Issues of Cruise Tourism and Sustainability. *Journal of Hospitality and Tourism Management*, 18, 107 - 116.
- LOUVIERE, J. J. 1988. *Analyzing Decision Making: Metric Conjoint Analysis*, California USA, Sage Publications Inc.
- MARQUINA, P. 2010. The Influence of Corporate Social Responsibility on Peruvian's Consumers Purchasing Behavior. *Journal of Leadership, Accountability and Ethics*, 8, 70-79.
- MC HUGH, M. Greening the Supply Chain. In: BRAND DIRECTOR, C. S. M., ed. *Cruise Shipping Virtual Conference*, 2010 Online.
- MCFADDEN, D. 1980. Consumer Behaviour. *Journal of Business*, 53, S13 - S29.
- MILLER, G., RATHOUSE, K., SCARLES, C., HOLMES, K. & TRIBE, J. 2010. Public Understanding of Sustainable Tourism. *Annals of Tourism Research*, 37, 627 - 645.
- MOHR, L. A., WEBB, D. J. & HARRIS, K. E. 2001. Do Consumers Expect Companies to be Socially Responsible? The Impact of Corporate Social responsibility on Buying Behaviour. *The Journal of Consumer Affairs*, 35, 45 - 72.
- ORME, B. K. 2010. *Getting Started with Conjoint Analysis: Strategies for Product Design and Pricing Research*, Research Publishers LLC, USA.
- ORME, B. K. 2015. Perceptual Choice Experiments: Enhancing CBC to Get from Which to Why. Sawtooth Software Inc. Conference March 23 - 27, 2015. Loews Portofino Bay Hotel, Orlando, Florida: Sawtooth Software Inc.
- ORME, B. K. & HOWELL, J. 2009. Application of Covariates Within Sawtooth Software's CBC/HB Program: Theory and Practical Example. Sawtooth Software Research Series. [www.sawtoothsoftware.com](http://www.sawtoothsoftware.com): Sawtooth Software Inc., Sequim WA.
- PETRICK, J. F. 2005. Segmenting cruise passengers with price sensitivity. *Tourism Management*, 26, 753-762.
- PETRICK, J. F. 2011. Segmenting Cruise Passengers With Perceived Reputation. *Journal of Hospitality and Tourism Management*, 18, 48-53.
- PSA 2011. The Cruise Review: Published May 2011. [http://www.the-psa.co.uk/downloads/PSA\\_Cruise\\_Review\\_2011.pdf](http://www.the-psa.co.uk/downloads/PSA_Cruise_Review_2011.pdf): Passenger Shipping Association.
- PSA 2013. The Cruise Review: Published March 2013. [http://www.the-psa.co.uk/downloads/PSA\\_Cruise\\_Review\\_published\\_2013.pdf](http://www.the-psa.co.uk/downloads/PSA_Cruise_Review_published_2013.pdf): Passenger Shipping Association.
- PSA & ACE 2011. Annual Report 2010/2011. UK: Passenger Shipping Association.
- PSA & ACE 2012. Annual Report 2011/2012. [http://www.the-psa.co.uk/downloads/PSA\\_ACE\\_Annual\\_Review\\_2011-2012.pdf](http://www.the-psa.co.uk/downloads/PSA_ACE_Annual_Review_2011-2012.pdf): Passenger Shipping Association & Association of Cruise Experts.
- RCI 2008. 2008 Stewardship Report. Royal Caribbean International; Celebrity Cruises; Azamara Cruises.
- RETI 2008. Renewable Energy in Tourism Initiative: Best Practices in the Cruise Line Sector. June 2008 ed. <http://www.renewabletourism.org>: University of Colorado at Boulder; National Renewable Energy Laboratory; East Carolina University.
- ROTONDO, A. M. 2012. Travel Insurance Primer for Cruise Travelers In: [WWW.CRUISECRITIC.CO.UK](http://WWW.CRUISECRITIC.CO.UK) (ed.) *Luxury Cruise Bible* blog at [www.luxurycruisebible.com](http://www.luxurycruisebible.com): <http://www.cruisecritic.co.uk/articles.cfm?ID=274> Accessed: 19/01/2012.
- SARKAR, R. 2008. Public policy and corporate environmental behaviour: a broader view. *Corporate Social Responsibility and Environmental Management*, 15, 281-297.
- SATCHELL, A. 2011. Cruise Lines leep trying to shrink their environmental foot print. *Florida Sun Sentinel*.
- SHEPPARD, V. A. & FENNELL, D. A. 2008. The Multidimensional Ethics Scale and Cruise Ship Tourists: testing the Troubled Waters. *Tourism in Marine Environments*, 5, 259 - 270.
- SHOWKER, K. & SEHLINGER, B. 2007. *The Unofficial Guide to Cruises*, Hoboken, NJ, Wiley.
- SMITH, M. D. & BRYNJOLFSSON, E. 2001. Consumer decision-making at an Internet shopbot: Brand still matters. *Journal of Industrial Economics*, 49, 541-558.

- SMITH, N. C., READ, D. & LOPEZ-RODRIGUEZ, S. 2010. Consumer perceptions of Corporate Social Responsibility: The CSR Halo Effect. Faculty & Research Working Paper.  
<http://www.insead.edu/facultyresearch/research/doc.cfm?did=43990>: INSEAD: Social Innovation Centre.
- STERN, S. B. 2007. Stern's Guide to the Cruise Vacation., Gretna, La, Pelican.
- SUSTAINABLE CRUISE. 2012. The Project - Sustainable Cruise [Online].  
<http://www.sustainablecruise.eu/en/the-project-sustainable-cruise/>  
[www.sustainablecruise.eu](http://www.sustainablecruise.eu). Available: <http://www.sustainablecruise.eu/en/the-project-sustainable-cruise/> [Accessed 02/08/2012].
- SWEETING, J. E. N. & WAYNE, S. L. 2003. A Shifting Tide: Environmental Challenges & Cruise Industry Responses. Washington, D.C.: Conservation International.
- TEARFUND 2001. Tourism putting ethics into practice.
- TUNNEY, D. 2011. Going green on the deep blue sea. Travel Weekly.  
<http://www.travelweekly.com/print.aspx?id=230085>: [www.travelweekly.com](http://www.travelweekly.com).
- UNWTO 2004. Making Tourism Work for Small Island Developing States (SIDS). Madrid, Spain: United Nations World Tourism Organisation.
- WARD, D. 2008. The First-time Cruise Guide: All Your Questions Answered., Singapore, Berlitz.
- WARD, D. 2010. Complete Guide to Cruising & Cruise Ships 2010, Singapore, Berlitz.



**Table 1: Average Utility Values & Average Importance**

Attribute /Levels	Average Utility Total (Rescaled to Zero Centred Diffs)	Average Importance Total (%)
<b>Standard</b>		<b>28.40</b>
6+ Star	66.80	
5 Star	45.96	
4 Star	29.59	
3 Star	10.98	
2 Star	-32.15	
1 Star	-121.17	
<b>Price</b>		<b>24.64</b>
£500 pp inside cabin	11.30	
£800 pp outside-view cabin	42.99	
£1000 pp balcony cabin	23.44	
£1400 pp balcony cabin	-1.94	
£1800 pp deluxe cabin	-15.93	
£2300 pp suite	-59.86	
<b>Duration</b>		<b>13.06</b>
21 days cruise only	0.18	
14 days cruise only	5.74	
7 days cruise only	8.54	
3 days cruise only	-29.28	
21 days fly/cruise	-3.13	
14 days fly/cruise	3.43	
7 days fly/cruise	14.52	
<b>Destination</b>		<b>12.68</b>
Europe, UK, Baltic & Mediterranean	18.67	
Africa	-24.53	
Asia	-3.40	
N. America, Caribbean	16.40	
S. America	-2.49	
Antarctica	-12.57	
Australia, Oceania	7.92	
<b>CSER</b>		<b>11.82</b>
No CSER PP	-36.28	
Has CSER PP	36.28	
<b>Brand (Name)</b>		<b>6.76</b>
Company A	1.00	
Company B	2.90	
Company C	-1.28	
Company D	-3.51	
Company E	0.90	

<b>Disruption</b>		<b>2.63</b>
Travel Insurance Included	3.89	
No Travel Insurance Included	-3.89	

**Figure: 1: Cruise Consumers cruise package utility in CBDM**

